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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,890	12/31/2003	Kevin J. Lee	42P15670	8890

7590

09/29/2005

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EXAMINER

TRAN, MAI HUONG C

ART UNIT PAPER NUMBER

2818

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/749,890	Applicant(s) LEE, KEVIN J.	
	Examiner Mai-Huong Tran	Art Unit 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Office Action is in response to Amendment filed on 08/15/05.

Claims 11-25 are presented for examination.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11-25 are rejected under 35 U. S. C. § 102 (e) as being anticipated by U.S. Patent No. 6,767,763 to Uchiyama.

Regarding to claim 11, Uchiyama discloses a structure comprising an anisotropic conductive film 12, said anisotropic conductive film comprising a front surface and a rear surface, said anisotropic conductive film comprising particles 12b of a consistent shape; a first raised contact 11a disposed over said front surface, said first raised contact forming part of a first wafer 3a/5a; and a second raised contact 14 disposed over said rear surface, said second raised contact forming part of a second wafer 3b/5b, wherein said second

raised contact 14 faces said first raised contact 11a (col. 3, lines 42-67, col. 4, lines 1-36, and figs. 1, 2, 4a, 4b).

Regarding to claim 12, the structure wherein said anisotropic conductive film comprises certain particles that are trapped between said first raised contact and said second raised contact (col. 4, lines 30-34, and fig. 4b).

Regarding to claim 13, the structure wherein said particles that are trapped between said first raised contact and said second raised contact form a continuous and conductive path (col. 4, lines 23-36, col. 5, lines 8-13, and fig. 4b).

Regarding to claim 14, the structure wherein said anisotropic conductive film further comprises other particles that are not trapped between said first raised contact and said second raised contact (fig. 4b).

Regarding to claims 15, the structure wherein said particles that are not trapped between said first raised contact and said second raised contact do not form a continuous and conductive path (col. 5, lines 28-32).

Regarding to claim 16, Uchiyama disclose a stacked-substrate structure comprising a first substrate 5a with a first surface, said first surface having a first raised

contact 11a; an anisotropic conductive adhesive 12 disposed over said first surface, said anisotropic conductive adhesive having particles 12b with a consistent shape; and a second substrate 5b with a second surface, said second surface having a second raised contact 14, said second surface disposed over said anisotropic conductive adhesive, wherein said second raised contact 14 faces said first raised contact 11a, wherein some of said particles 12b are trapped between said second raised contact and said first raised contact to form a continuous and conductive path (col. 3, lines 42-67, col. 4, lines 1-36, and figs. 2, 4a, 4b).

Regarding to claim 17, the stacked-substrate structure wherein said first surface is a front surface and said second surface is a front surface (figs. 1, 2, 4a, 4b).

Regarding to claim 18, the stacked-substrate structure wherein said first surface is a front surface and said second surface is a rear surface (figs. 1, 2, 4a, 4b).

Regarding to claim 19, the stacked-substrate structure wherein said first surface is a rear surface and said second surface is a rear surface (figs. 1, 2, 4a, 4b).

Regarding to claim 20, the stacked-substrate structure wherein said first substrate and said second substrate are structurally similar (figs. 1, 2, 4a, 4b).

Regarding to claim 21, the stacked-substrate structure wherein said first substrate and said second substrate are functionally similar (Col. 3, lines 41-53, figs. 1, 2, 4a, 4b).

Regarding to claim 22, the stacked-substrate structure wherein said first substrate and said second substrate are structurally and functionally dissimilar (col. 4, lines 11-37, figs. 2, 4a, 4b).

Regarding to claim 23, the stacked-substrate structure wherein said first substrate and said second substrate are pre-thinned (col. 3, lines 49-53, fig. 1).

Regarding to claim 24, the stacked-substrate structure wherein said first substrate and said second substrate are wafers (col. 3, lines 41-53, fig. 1).

Regarding to claim 25, the stacked-substrate structure wherein said first substrate and said second substrate are portions of wafers (col. 3, lines 41-65, figs. 1, 2).

Response to Arguments

Applicant's arguments with respect to claims 11-15 and new claims 16-25 have been considered but are moot in view of the new ground of rejection.

Applicant argues that Cobbley et al. (US 6,777,071) fail to teach the amended claim 11 with particles of a consistent shape. Examiner agrees with applicant. However, Uchiyama (U.S. 6,767,763) teaches anisotropic conductive film comprising particles of a consistent shape.

Therefore, for the above reason, it is believed that the new ground of rejection is proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2818

Conclusion

Any inquiry concerning this communication on earlier communications from the examiner should be directed to Mai-Huong Tran, (571) 272-1796. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM. The examiner's supervisor, David Nelms can be reached on (571) 272-1787.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Mai-Huong Tran